

ANSI-Flanged Globe Valves

- chilled or hot water, up to 60% glycol, steam
- ANSI Class 125, up to 175 psi below 150°F
- 125
- Cast iron ASTM A126 Class B





Type overview			
Туре			DN
G6125CS			125
Technical data			
	Functional data	Valve size [mm]	5" [125]
		Fluid	chilled or hot water, up to 60% glycol, steam
		Fluid Temp Range (water)	32350°F [0176°C]
		Fluid Temp Range (steam)	32338°F [0170°C]
		Body Pressure Rating	ANSI Class 125, up to 175 psi below 150°F
		Flow characteristic	equal percentage
		Leakage rate	ANSI Class III
		Pipe connection	Flange for use with ASME/ANSI class 125
		Servicing	repack/rebuild kits available
		Rangeability Sv	100:1
		Max Differential Pressure (Steam)	50 psi [345 kPa]
		Flow Pattern	2-way
		Controllable flow range	stem up - open A – AB
		Cv	263
		Maximum Inlet Pressure (Steam)	100 psi [690 kPa]
	Materials	Valve body	Cast iron - ASTM A126 Class B
		Valve plug	Stainless steel
		Stem	316 stainless steel
		Stem seal	NLP EPDM (no lip packing)
		Seat	Stainless steel AISI 316
	Suitable actuators	Non Fail-Safe	EVB(X)
		Spring	2*AFB(X)

AVKB(X)

Electronic fail-safe



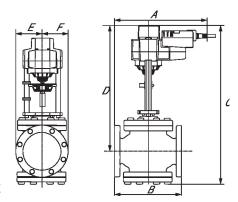
Safety notes



- WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov
- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.

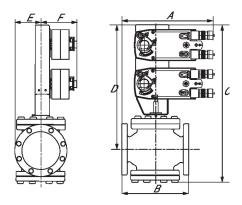
Dimensions

Туре	DN	Weight
G6125CS	125	180 lb [81 kg]



EVB, EVX, RVB, RVX

Α	В	С	D	E	F	Number of Bolt Holes
16.4" [416]	15.7" [400]	25.4" [646]	17.5" [445]	5.0" [127]	5.0" [127]	8

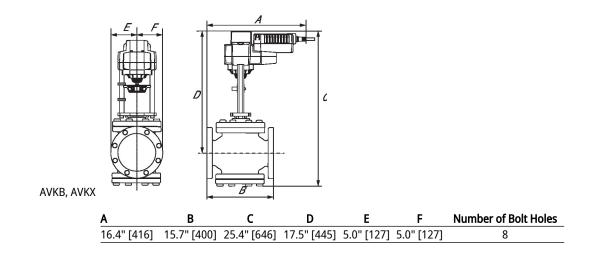


2*AFB, 2*AFX

Α	В	C	ט	E	F	Number of Bolt Holes
14.8" [377]	15.7" [400]	28.7" [730]	21.0" [533]	5.0" [127]	5.3" [135]	8



Dimensions





Modulating, Non fail-safe, 24 V





5-year warranty





Nominal voltage AC/DC 24 V	Technical data			
Nominal voltage frequency S0/60 Hz				
Nominal voltage range AC 19.228.8 V / DC 21.628.8 V	Electrical data	Nominal voltage	AC/DC 24 V	
Power consumption in operation 5 W Power consumption in rest position 1.5 W Transformer sizing 7.5 VA Electrical Connection 18 GA plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEM/ 2 / IP54 Overload Protection electronic throughout full stroke electronic throughout full stroke electronic throughout full stroke electronic throughout full stroke electronic actuators are double insulated Functional data Actuating force motor 2500 N [560 lbf] Operating range Y 210 V Operating range Y 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA w ZG-R01 (500 Ω, 1/4 W resistor) input impedance 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA Position feedback U 210 Max. 0.5 mA Direction of motion motor selectable with switch 0/1 Manual override 5 mm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running Time (Motor) 90 s / Running Time (Motor) 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA 660730-102 CE acc. to 2014/30/EU and 2014/35/EU		Nominal voltage frequency	50/60 Hz	
Power consumption in rest position Transformer sizing 7.5 VA Electrical Connection 18 GA plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEM/2 / IP54 Overload Protection Electrical Protection Electrical Protection 200 N [560 lbf] Operating range Y Operating range Y Operating range Y 100 M G of 210 V Operating range Y 100 M G of 210 V (0.1 mA), 500 Ω for 420 mA Position feedback U 210 V Position feedback U 100 M G of 210 V (0.1 mA), 500 Ω for 420 mA Direction of motion motor selectable with switch 0/1 Manual override 5 mm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running Time (Motor) 90 s / Running Time (Motor) 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to U160730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V	
Transformer sizing 7.5 VA Electrical Connection 18 GA plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEM/ 2 / 1/P54 Overload Protection electronic throughout full stroke Electrical Protection actuators are double insulated Functional data Actuating force motor 2500 N [560 lbf] Operating range Y 210 V Operating range Y 210 V Operating range Y 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA Position feedback U 210 V Position feedback U 100 Mαx 0.5 mA Direction of motion motor selectable with switch 0/1 Manual override 5 mm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN 1P54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Power consumption in operation	5 W	
Electrical Connection 18 GA plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEM/ 2 / IP54 Overload Protection electronic throughout full stroke Electrical Protection actuators are double insulated Functional data Actuating force motor 2500 N [560 lbf] Operating range Y 210 V Operating range Y 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA w/ ZG-R01 (500 Ω, 1/4 W resistor) Input impedance 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA Position feedback U 210 V Position feedback U note Max. 0.5 mA Direction of motion motor selectable with switch 0/1 Manual override 5 mm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Power consumption in rest position	1.5 W	
Conduit connector, degree of protection NEM/ 2 / IP54 Overload Protection electronic throughout full stroke electronic throughout full stroke electronic throughout full stroke electronic throughout full stroke actuators are double insulated Functional data Actuating force motor 2500 N [560 lbf] Operating range Y 210 V Operating range Y 210 V Operating range Y 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA Position feedback U 210 V Position feedback U 100 Max. 0.5 mA Direction of motion motor selectable with switch 0/1 Manual override 5 mm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Transformer sizing	7.5 VA	
Functional data Actuating force motor 2500 N [560 lbf] Operating range Y 210 V Operating range Y 100 kΩ for 210 V Operating range Y 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA w / ZG-R01 (500 Ω, 1/4 W resistor) Input impedance 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA Position feedback U 210 V Position feedback U 100 kΩ for 210 V Posit		Electrical Connection	conduit connector, degree of protection NEMA	
Functional data Actuating force motor Operating range Y Operating range Y Operating range Y note Input impedance Position feedback U Position feedback U note Max. 0.5 mA Direction of motion motor Manual override Stroke Running Time (Motor) Running Time (Motor) Running time motor note Noise level, motor Position indication Safety data Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing Actuating force motor 2500 N [560 lbf] 210 V 210 V A20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor) Max. 0.5 mA Selectable with switch 0/1 Sm hex crank (3/16" Allen), supplied 5 mm hex crank (3/16" Allen), supplied 5 mc hex crank (3/16" Allen), supplied 6 m		Overload Protection	electronic throughout full stroke	
Operating range Y Operating range Y ote Input impedance Input		Electrical Protection	actuators are double insulated	
Operating range Y note Input impedance Input	Functional data	Actuating force motor	2500 N [560 lbf]	
Input impedance 100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA Position feedback U 210 V Position feedback U note Max. 0.5 mA Direction of motion motor selectable with switch 0/1 Manual override 5 mm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Operating range Y	210 V	
Position feedback U Position feedback U note Position feedback U note Max. 0.5 mA Direction of motion motor Selectable with switch 0/1 Manual override Stroke 2" [50 mm] Running Time (Motor) Running time motor note Noise level, motor Osition indication Safety data Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Operating range Y note	420 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)	
Position feedback U note Direction of motion motor Selectable with switch 0/1 Manual override Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note Noise level, motor Position indication Safety data Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing Agency Listing Max. 0.5 mA Max. 0.5 mA Max. 0.5 mA Max. 0.5 mA Mexance Selectable with switch 0/1 Smm hex crank (3/16" Allen), supplied Smm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Input impedance		
Direction of motion motor Manual override Stroke Stroke Running Time (Motor) Running time motor note Noise level, motor Position indication Safety data Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing Direction motor Selectable with switch 0/1 5 mm hex crank (3/16" Allen), supplied 2" [50 mm] Running Time (Motor) 90 s / Running Time (Motor) 90 s / Running Time (Motor) 60 dB(A) Mechanical, with pointer Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Position feedback U	210 V	
Manual override 5 mm hex crank (3/16" Allen), supplied Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Position feedback U note	Max. 0.5 mA	
Stroke 2" [50 mm] Running Time (Motor) 90 s / Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Direction of motion motor	selectable with switch 0/1	
Running Time (Motor) Running time motor note Running time motor note Noise level, motor Position indication Safety data Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Manual override	5 mm hex crank (3/16" Allen), supplied	
Running time motor note constant, independent of load Noise level, motor 60 dB(A) Position indication Mechanical, with pointer Safety data Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Stroke	2" [50 mm]	
Noise level, motor Position indication Mechanical, with pointer Class 2 Supply Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Running Time (Motor)	90 s /	
Position indication Mechanical, with pointer Power source UL Class 2 Supply Degree of protection IEC/EN IP54 Degree of protection NEMA/UL NEMA 2 Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Running time motor note	constant, independent of load	
Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing Class 2 Supply IP54 NEMA 2 UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Noise level, motor	60 dB(A)	
Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure UL Enclosure Type 2 Agency Listing cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Position indication	Mechanical, with pointer	
Degree of protection NEMA/UL Enclosure UL Enclosure Type 2 Agency Listing cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU	Safety data	Power source UL	Class 2 Supply	
Enclosure UL Enclosure Type 2 Agency Listing CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Degree of protection IEC/EN	IP54	
Agency Listing		Degree of protection NEMA/UL	NEMA 2	
E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU		Enclosure	UL Enclosure Type 2	
		Agency Listing	E60730-1:02	
		Quality Standard		



Technical data Safety data UL 2043 Compliant Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC Ambient humidity Ambient temperature Ambient temperature Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC Ambient humidity Ambient temperature -22...122°F [-30...50°C] Storage temperature -40...176°F [-40...80°C]

Weight Weight []

Materials Housing material Die cast aluminium and plastic casing

Footnotes

† Use flexible metal conduit. Push the listed conduit fitting device over the actuator's cable to butt against the enclosure. Screw in conduit connector. Jacket the actuators input wiring with listed flexible conduit. Properly terminate the conduit in a suitable junction box. Rated impulse Voltage 800V. Type of action 1. Control pollution degree 3.

maintenance-free

Electrical installation

X INSTALLATION NOTES

Servicing

🛕 Actuators may also be powered by DC 24 V.

 $\underline{\hspace{0.1in}}$ A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.

Actuators with plenum cable do not have numbers; use color codes instead.

Meets cULus requirements without the need of an electrical ground connection.

Narning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

Wiring diagrams

